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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,725	09/16/2003	Siau-Way Liew	3155/119	4659

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EXAMINER
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RAMIREZ, JOHN FERNANDO

ART UNIT	PAPER NUMBER
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3737

MAIL DATE	DELIVERY MODE
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06/01/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/665,725

Applicant(s)

LIEW ET AL.

Examiner

John F. Ramirez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6,9,10,12-55 and 89-172 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-6,9-10,12-55,89-172 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION*****Election/Restrictions***

The amendment filed on 02/23/07 is acknowledged. However, the examiner of record disagrees with the election species as indicated by applicant. Therefore, the previous restriction requirement has been withdrawn and a new election restriction requirement has been made in order to better indicate the different inventions and species being claimed.

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims **1-6, 15-52, 54, and 55**, drawn to a method for analyzing **bone** mineral density and surrounding tissue structure deriving quantitative data from **bone marrow defects parameters**, classified in class 378, subclass 62.
- II. Claims **9-10**, drawn to a method for analyzing **hip and spine** mineral density and surrounding tissue structure deriving quantitative data from **microarchitecture parameters on parallel and perpendicular to stress lines and microarchitecture parameters on vertical and horizontal structures**, classified in class 382, subclass 128.
- III. Claims **12-13, 89-130** are drawn to a method for analyzing **bone** mineral density and surrounding tissue structure deriving quantitative data from **extracting bone parameters such as stainless steel equivalent, and fourier spectral analysis**, classified in class 382, subclass 280.

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- IV. Claims **14, 131-172** are drawn to a method for analyzing **bone** mineral density and surrounding tissue structure deriving quantitative data from **cartilage defect parameters**, classified in class 378, subclass 54.
- V. Claim **53-55** are drawn to a method for analyzing **bone** mineral density and surrounding tissue structure deriving quantitative data from **calibrated density and intensity of extracted structures**, classified in class 382, subclass 132.

The inventions are distinct, each from the other because of the following reasons:

Inventions I, II, III, IV and V are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different designs, modes of operation, and effects (MPEP § 802.01 and § 806.06). In the instant case, the different inventions are not capable of use together and they have different modes of operation, and effects. For example, Group I discloses a method for analyzing bone mineral density and surrounding tissue structure deriving quantitative data from bone marrow defects, Group II is a method for analyzing hip mineral density and surrounding tissue structure deriving quantitative data from microarchitecture parameters on parallel and perpendicular to stress lines and microarchitecture parameters on vertical and horizontal structures, Group III is a method for analyzing bone mineral density and surrounding tissue structure deriving quantitative data from extracting bone parameters such as stainless steel equivalent, and fourier spectral analysis. However, Group IV is a method for analyzing bone mineral density and surrounding tissue structure deriving quantitative data from cartilage defect parameters,

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and Group V is a method for analyzing bone mineral density and surrounding tissue structure deriving quantitative data from calibrated density and intensity of extracted structures.

Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

IF THE APPLICANT ELECTS GROUP I, THEN THE FOLLOWING ELECTION OF SPECIES REQUIREMENT IS APPLICABLE.

This application contains claims directed to the following patentably distinct species:

Species IA as claimed in claims 22-28, 35.

Species IB as claimed in claims 29-34.

Species IC as claimed in claims 36-37.

The species are independent or distinct because they are considered to be a change in scope as dependent from claim 1.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claims are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species.

MPEP § 809.02(a).

IF THE APPLICANT ELECTS GROUP III, THEN THE FOLLOWING ELECTION OF SPECIES REQUIREMENT IS APPLICABLE.

This application contains claims directed to the following patentably distinct species:

Species IIIA as claimed in claims 100-105, 113.

Species IIIB as claimed in claims 106-112.

Species IIIC as claimed in claims 114-115.

The species are independent or distinct because they are considered to be a change in scope as dependent from claim 12.

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Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claims are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

IF THE APPLICANT ELECTS GROUP IV, THEN THE FOLLOWING ELECTION OF SPECIES REQUIREMENT IS APPLICABLE.

This application contains claims directed to the following patentably distinct species:

Species IVA as claimed in claims 142-147, 155.

Species IVB as claimed in claims 148-154.

Species IVC as claimed in claims 156-157.

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The species are independent or distinct because they are considered to be a change in scope as dependent from claim 14.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claims are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species.

MPEP § 809.02(a).

A telephone call was made to Alexander Smolenski on May 16, 2007 to request an oral election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.



The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John F. Ramirez whose telephone number is (571) 272-8685. The examiner can normally be reached on (Mon-Fri) 7:30 - 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian L. Casler can be reached on (571) 272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JFR

  
ELENI MANTIS MERCADER  
SUPERVISORY PATENT EXAMINER